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# A Tour of the Guide

This section describes how *Greening Federal Facilities* is organized and how you as a facility manager or designer can extract information from the guide as efficiently as possible to aid in your decision-making.

The guide emphasizes opportunities in ongoing operations, but this second edition adds more information for project designers. Thus, the guide now provides a starting place for comprehensive information for greening the entire facility—for new projects or renovations as well as ongoing operations of existing facilities. It can serve as a resource for greening information and principles for small design projects that may not go beyond the facility or base for design. For all sections, we encourage users to follow up on the references and go well beyond the ideas and actions introduced.

## Why this guide is particularly useful to facility managers

*Greening Federal Facilities* identifies “opportunities” as focal points for helping facility managers to make changes that will make their operations more sustainable. An opportunity identifies ways to use a particular technology or practice to make major positive changes in a facility to reduce energy use and environmental impacts. A good example of an opportunity is roof repair. The need to replace a roof presents opportunities to increase insulation levels, to install skylights for daylighting, and even to help control stormwater runoff. These opportunities for *Greening Federal Facilities* are described in each technology or design practice section.

## How this guide is organized

The guide is organized into nine major parts:

**Part I – Rationale and Basics** defines the playing field for facility managers and reviews the relevant Federal laws, regulations, and Executive Orders that are helping to drive the greening of Federal facilities.

**Part II – Environmental and Energy Decision-Making** introduces the critically important process of *integration* in design, and reviews economic and environmental analysis, procurement practices, and financing—information that a facility manager can use to justify difficult and sometimes expensive decisions in an era of tight budgets.

**Part III – Site and Landscape Issues** examines the macro scale—how a facility fits into the broader land-use context of the region in a manner that minimizes environmental impact—and addresses specific greening measures relating to the site and landscape.

**Part IV – Building Design** covers design practices to maximize building energy performance, to minimize energy use, and to make use of renewable energy systems, including solar thermal energy, passive solar energy, wind energy, and daylighting. While these measures are often geared to new construction, they will also be useful for existing facilities undergoing significant modifications or renovations.

**Part V – Energy Systems** addresses a wide range of specific technologies and products that can be used to reduce energy use in buildings and make use of renewable power systems; 36 sections provide concise summaries of greening opportunities.

**Part VI – Water and Wastewater** examines water systems and opportunities for conserving this increasingly precious resource—from toilet selection to rain-water harvesting.

**Part VII – Materials, Waste Management, and Recycling** presents information on materials that are specified and used in Federal facilities—from structural building components to floor coverings to furnishings—as well as the management of waste, including ultimate decommissioning and deconstruction of buildings when their useful life is over.

**Part VIII – Indoor Environmental Quality** examines issues relating to the health and productivity of people living and working in Federal housing and other buildings.

**Part IX – Managing Buildings** addresses commissioning, the importance of ongoing maintenance to ensure healthy indoor environments, special considerations relating to leased buildings, and various employee training measures and incentives to help ensure that green facilities will remain green throughout their lifetime.

## What the icons mean

The guide is organized with the help of icons to direct you to particularly pertinent information. These icons are used as the situation dictates and are reasonably self-explanatory.



Tip



Cost Information



Cautionary Note



Example

**Examples** show concrete instances of exactly how particular greening strategies have been successfully used. Look for the “file folder” icon to find these examples; check the Web site listed below for more details on these and other projects.

**References** and **Contacts** in the printed version of this guide will direct you to a few of the key information sources you can use to implement specific technologies and design practices. These information sources are limited because of space constraints. Please see also “Greening Initiatives” at [www.eren.doe.gov/femp/](http://www.eren.doe.gov/femp/) for more information.